



Civil Engineering

**BASE EXTERIOR SIGN PROGRAM AND BUILDING GRAPHICS**

----- **Compliance with this publication is mandatory** -----

This instruction implements AFPD 32-10, *Installations and Facilities*, and provides standards for signs used on Air Education and Training Command (AETC) bases. Attachment 1 to this instruction describes the material, construction, and design of each sign (building identification signs, directional signs, street signs, base entrance signs, base marquee signs, and pictographs).

**SUMMARY OF REVISIONS**

Reduces and consolidates the number of signs. Changes address numbers and sign letter styles for historic and non-historic buildings and the letter style for stand-alone signs. Changes type-face selection for signs on historical buildings. Prohibits building numbers on stand-alone signs. Limits display of name plates on stand-alone signs to wing commanders only and adds use of name plates display on gate houses. Adds multiple awards equally displayed. Adds to monument signs permanent bases composed of concrete pedestal foundations for HQ AETC building 900, numbered air force headquarters, and wing headquarters main entrances. Adds type-face selection to painted signs. Deletes the use of building numbers on all buildings with street addresses and from stand-alone signs. Designates handicap parking signs to be curb mounted. Consolidates signs when practical such as stop signs on the same posts as street name signs. Deletes racing stripes on water towers and petroleum, oil, and lubricant (POL) tanks. Adds sortie signs. Adds electronic reader boards and lighted box signs. A ★ indicates revision from the previous edition.

**1. Objective of the Program.** Standards for signs are established to:

- 1.1. Provide AETC bases with quality signs.
- ★1.2. Reduce and consolidate the number of signs when possible.
- 1.3. Improve base appearance.
- 1.4. Make signs easier to read and understand.
- 1.5. Specify materials, construction, and methods to ensure signs look professional, are easy to maintain, and are easy to change.
- 1.6. Identify buildings and their functions.

★2. **Waivers.** Send requests for waivers to this instruction to HQ AETC, Directorate of The Civil Engineer (HQ AETC/CE), for staffing. Requests must include color photographs showing size, design, estimated cost, and actual desired color of proposed signs.

★3. **AETC Associate Units.** AETC units on a base of another command (associate units) are encouraged to follow host-base standards. If none exist, follow this instruction in the construction of exterior signs.

★**4. Materials and Installation.** Materials and installation should conform to AFP 88-40, *Sign Standards*, appendix A, and this instruction. Select aluminum tubing or wood for facility sign posts and ensure the selected material is used throughout the base and is architecturally consistent. Illuminate exterior signs only when reflective letters do not provide adequate facility identification during hours of darkness or when special emphasis is needed (such as at the main gate). Maintain architectural consistency throughout the base for signs constructed with permanent bases or pedestals. Signs other than those governed by the *Manual on Uniform Traffic Control Devices* (MUTCD), warning signs, and morale signs with specific graphics will be reflective sheeting engineer grade brown with white letters. If sign has lettering on one side, only back side will be a solid color of engineer grade brown. Posts for traffic control signs should be nongalvanized metal (if they are to be painted) or place a vinyl sleeve over the post if galvanized metal or tubular aluminum is used.

4.1. **Hardware.** Use aluminum or galvanized steel for signs to reduce the possibility of rust.

4.2. **Sign Stock.** Sign stock may be wood or aluminum; aluminum is better. Aluminum stock will be 12 gauge (.0808 inches) or thicker. Use waterproof exterior grade plywood, preferably 1/2 inch.

★4.3. **Reflective Materials.** Reflectorized signs must conform to Federal Specification LS-300C and the MUTCD. The reflective sheet must be LS-300C, type 1, table III, reflectivity II (high intensity encapsulated lens) for building numbers; regulatory signs; warning, street name, and directional signs; and building address signs. LS-300C, type 1, table II, reflectivity I (engineering grade) may be used for less critical signs, such as parking signs. Letters and numbers for stand-alone signs will be Helvetica Medium upper and lower case as shown in figure A1.1. For signs with only one line, use 5-inch upper case and 4-inch lower case letters and numbers. For signs with more than one line, use 4-inch upper case and 3-inch lower case letters and numbers. Reflective cutout letters and numbers must meet Federal Specification LS-300C, type 1, table III, reflectivity II. Address numbers and signs for historical buildings will be Clarendon Medium type-face as shown in figure A1.2. Address numbers for buildings not identified as historical will use Helvetica type-face as shown in figure A1.3.

**5. Building Identification Signs.** These signs identify essential functions such as command elements and functions frequently used by visitors and newly assigned personnel. Building identification signs are divided into

two types: signs attached to the building and signs that stand alone (not attached to the building). A building will normally have only one type of sign. Using more than one sign may be necessary when there is more than one major activity, widely separated entrances, or units of different commands located in a single facility. Good judgment will dictate the actual number of signs for a facility with these conditions. In all cases, signs must be kept to a minimum.

**5.1. Signs Attached to Buildings.** These consist of signs painted on a building, letters and logos attached to a building (figures A1.4, A1.5, and A1.6), and signs engraved into the facade of a building. This type of sign must be given thorough deliberation to ensure architectural compatibility, including size, color, material, and design with the building to which it is attached. This instruction does not specify letter size, style, material, or color because the choice is too broad within the architectural compatibility range. Except for signs painted on a building, this type of sign is permanent because further detachment will deface the building.

5.1.1. **Letters and Logos Attached to Buildings.** This type of sign can be attached to all types of buildings. Special care must be taken in selecting the method and location of anchorage to minimize defacing the building if it becomes necessary to change the sign. The sign material (including attachment hardware) will be a nonferrous metal or plastic to prevent rust streaking. The finish selected for the sign must not fade or otherwise deteriorate.

5.1.2. **Signs Engraved into the Facade.** This type of sign is permanent, usually adaptable only to masonry buildings and is limited to buildings named as memorials to persons or places.

## 5.2. Signs on Historical Buildings:

★5.2.1. Historical buildings and buildings eligible for designation as historical buildings under AFP 88-40 may have appropriate signs mounted on building exterior that are compatible with the buildings on base. Type-face for historic signage is Clarendon Medium.

5.2.2. Signs engraved in the masonry structure of historical buildings will not be removed.

## 5.3. Stand-Alone Signs:

5.3.1. Signs should not be replaced unless normal sign maintenance is required (for example, damaged, faded,

or obsolete).

5.3.2. Sign sizes must be as shown in figure A1.1.

★5.3.3. Letters must be as shown in figure A1.1 and comply with paragraph 4.3. No building numbers will appear on signs. Type-face used will be Helvetica Medium.

5.3.4. Signs must have space for a unit emblem or other symbol. The following rules apply to the use of emblems and symbols.

★5.3.4.1. Signs for AETC units above squadron and higher level on AETC bases are authorized to display two emblems. See figure A1.1. Left to right side: wing/base, base/group, or group/squadron.

5.3.4.2. Signs for units from other commands based on AETC bases will be like those for AETC units except the name of their major command and unit emblem will be used.

5.3.4.3. Signs for independent AETC units (not attached to wings) at squadron level or higher on AETC bases will display emblems authorized in their own chain of command as noted in paragraph 5.3.4.1.

5.3.4.4. Signs for units of functions below squadron level will have only a wing emblem.

5.3.4.5. No sign will have more than two emblems.

5.3.4.6. When two emblems are used, the higher echelon emblem will be on the left when facing the sign.

5.3.4.7. The base civil engineer orders AETC and wing emblem decals through the base Communications and Information Directorate for procurement according to AFI 37-162/AETC Sup 1, *Managing the Processes of Printing, Duplicating, and Copying*. Include the following paper specifications when ordering decals: white vinyl, 4 to 5 mils thick, permanent pressure sensitive adhesive, clear coat over ink, 3-year durability for outdoor use.

5.3.4.8. Unit emblems will not be replaced just to meet suggested dimensions. Replace emblems only when the organizational unit changes or when emblems are faded or deteriorated.

5.3.5. Posts and cross-members may be painted to match the color of base building architecture. Reflective sheet color will be engineergrade brown on sign face.

★5.3.6. If used, names of individuals are limited to the wing commanders. Display the name, grade, and position

of the individual on a slat below the main sign. Color will be the same as the main sign. See figures A1.7 and A1.8 for details. Name plates of gate guards on duty may be displayed on gate house.

★5.3.7. Unit awards authorized for display are the Presidential Unit Citation, the Air Force Outstanding Unit Award, and the Air Force Organizational Excellence Award. Awards will be 4 inches high and centered between the edges of the sign. Multiple awards will be equally spaced between the edges of the sign (figure A1.7).

★5.4. **Monument Sign.** Fabrication of building and community identification signs with permanent bases or pedestals made with concrete foundation and finished with concrete above grade or any other permanent material is not permitted (figure A1.9). Only HQ AETC building 900, wing headquarters building, numbered air force headquarters building main entrances, and base marquee signs may use permanent bases or pedestals.

**6. Military Family Housing Signs.** Bases have the option to display the name and grade of the family housing occupant in a proper location on front of the quarters. The style and location of signs on quarters must be uniform throughout the housing area. Bases may use a permanent sign or slip-in letter system. The sign background and letters will be compatible with the house color. House addresses will be permanently posted on the quarters or marked on the curb. The address will not be part of the name sign.

## 7. Building Addresses:

★7.1. Painted signs should be fabricated on standard sheet metal stock and attached to the building. Signs should have 4- to 6-inch letters that are the opposite color of the existing facility number signs. The color and design scheme should match either concept 1 historical building (Clarendon Medium type-face, figure A1.2, for Randolph AFB) or concept 2 non-historical building (Helvetica Medium type-face, figure A1.3, for all other AETC bases) and should match your base architectural scheme.

7.2. Signs at main entrances should be placed over the door or on the right side of the door at a height of 6 to 8 feet. Address signs can be attached to any wall or facade. **NOTE:** Address sign appearance must be different from the building number signs (figure A1.10).

★7.3. The requirement to display building numbers is rescinded for all buildings with street addresses and stand-alone signs (paragraph 5.3.3). Building numbers will be removed when the building or building numbers

require painting. Building numbers will be retained in the Civil Engineer Real Property records for accountability purposes because congressional reporting on facility costs is still required. Provide those base activities dealing with base-wide customers separate cross-reference tools to ensure levels of customer support do not fall. Ensure emergency services agencies understand and adjust to this change.

**8. Artwork.** Artwork in the form of murals, racing stripes, slogans, and crests on building exteriors is not permitted. Emblems are limited to Air Force headquarters organizations only. Emblems will be engraved in wood and limited to one emblem mounted either above or to either side of the main entrance to a building.

**9. Directional Signs.** Signs showing the way to activities, buildings, or locations on the base must be constructed of reflective materials according to paragraph 4.3 with white upper and lower case letters (Helvetica) and 1/2-inch white border on brown background. Normally, no more than four entries should be displayed on a sign. The following rules also apply:

9.1. Make directional signs only for places most likely to be used by visitors and newcomers to the base.

9.2. Do not frame signs; mount them on 4-inch by 4-inch wood or square tubular structural steel posts when required due to wind loads.

9.3. Directional signs will have a 1/2-inch wide white border.

9.4. Do not place directional signs near organizational or building identification signs unless absolutely necessary.

9.5. See figures A1.11 and A1.12 for sign sizes.

#### **10. Street Name Signs:**

10.1. There will be one street name sign for each street at intersections. The location of these signs must be consistent throughout the base.

10.2. Signs will not be mounted more than 15 feet from the cross-street curb line.

10.3. Signs will be mounted with the bottom of the sign not less than 7 feet above the ground.

10.4. Signs will have a standard height of 6 inches. The length will be determined by the number of letters in the street name; however, signs will not be longer than 30

inches (figure A1.13).

10.5. Colors will be white letters and white border on engineer-grade brown background with full color emblem. Refer to paragraph 5.3.4.7 for ordering emblem decals.

10.6. Reflective materials will be used according to paragraph 4.3. Street names may be applied by using die-cut letters or by the silk screen process provided the signs have the reflective qualities outlined in paragraph 4.3.

10.7. Street name letters and numbers will be 4-inch upper case. For long street names, use narrow stroke widths to stay within the required sign length.

10.8. Supplementary lettering to indicate abbreviation of a street may be in smaller lettering, at least 2 inches high. Conventional abbreviation of a street may be in smaller lettering, at least 2 inches high. Conventional abbreviations for street (ST), avenue (AVE) and boulevard (BLVD) are acceptable except for the street name itself.

10.9. Street names must be centered vertically and horizontally between the emblem and the edge of the sign. Letter spacing will be the same as normal traffic sign letter spacing.

**11. Parking Signs.** Strictly limit reserved parking signs. Use metal framed signs about 4 inches high and fasten mechanically to the vertical curb face. Design and color should match the installation-wide system.

**★12. Handicap Parking.** May be designated using curb-mounted signs or pavement markings. Free-standing signs are discouraged.

**13. Main Gate Base Entrance Signs.** For command uniformity, main gate base entrance signs (figure A1.14) will have a background color of brown with beige lettering. Entrance signs will be replaced by attrition only and will not be changed if the physical condition of the existing sign is satisfactory.

**14. Main Gate Entry Screen Walls.** (See figure A1.15.) Keep signs to an absolute minimum. Use command, wing, or Air Force emblem only. Don't turn walls into billboards.

**★15. Traffic Control Signs.** Traffic control signs will be as specified in the MUTCD. Consolidate signs where practical, such as placing stop signs on the same posts as street name signs.

**16. Base Marquee Signs.** These signs should be located

at primary base entrances and base operations or the principal arrival point on the airfield. They should have permanent bases or pedestals (figure A1.16). At base entrances with divided streets, these signs can be located on islands between streets and can be two-sided to provide both arrival and departure information. Use one-sided message sign (figure A1.16) on arriving and departing side where no island exists between entering and departing traffic. Use of relocatable, wheel-mounted message signs is not authorized.

**17. Pictographs.** If pictograph symbols are used on any sign or structure, use the AETC standard pictograph symbols as shown in AFP 8840.

**★18. Water Towers and POL Tanks.** Painting the AETC emblem and logo on water towers and POL tanks is permitted but each emblem or logo must be carefully and proportionately displayed to convey a positive first impression.

**★19. Sortie Signs.** Use stand-alone signs as shown in figure A1.1. Width may be expanded up to 6 feet maximum. Use metal sign panel covered with engineer-grade brown reflective background. Message: Helvetica Medium letters and numbers cut from vinyl reflective sheeting; changeable letter tiles with magnetic back may also be used. Letter color is white.

**★20. Electronic Reader Board.** Signs are discouraged due to cost of purchase and maintenance. See paragraph 2 for procedures to request waivers to purchase electronic signs or lighted box signs for wall mounting or stand alone.

**21. Other Signs.** Signs other than those specified in this instruction will be designed according to AFP 88-40.

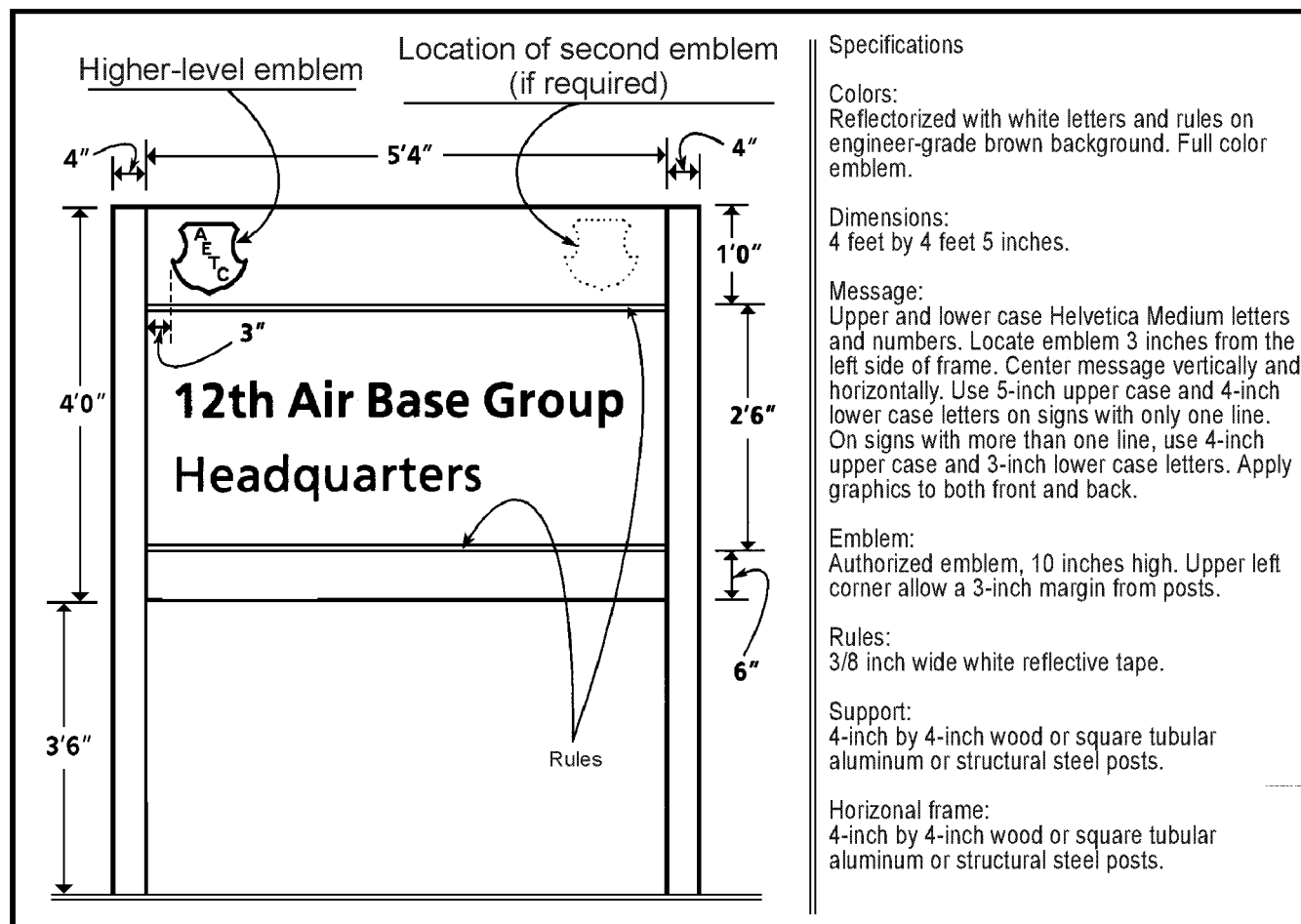
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The Civil Engineer

#### ***Attachment***

##### **1. Illustrations of Base Signs**

## ILLUSTRATIONS OF BASE SIGNS

**Illustrations.** The following figures illustrate base exterior signs with specifications.



**Figure A1.1. Reflectorized Signs.**

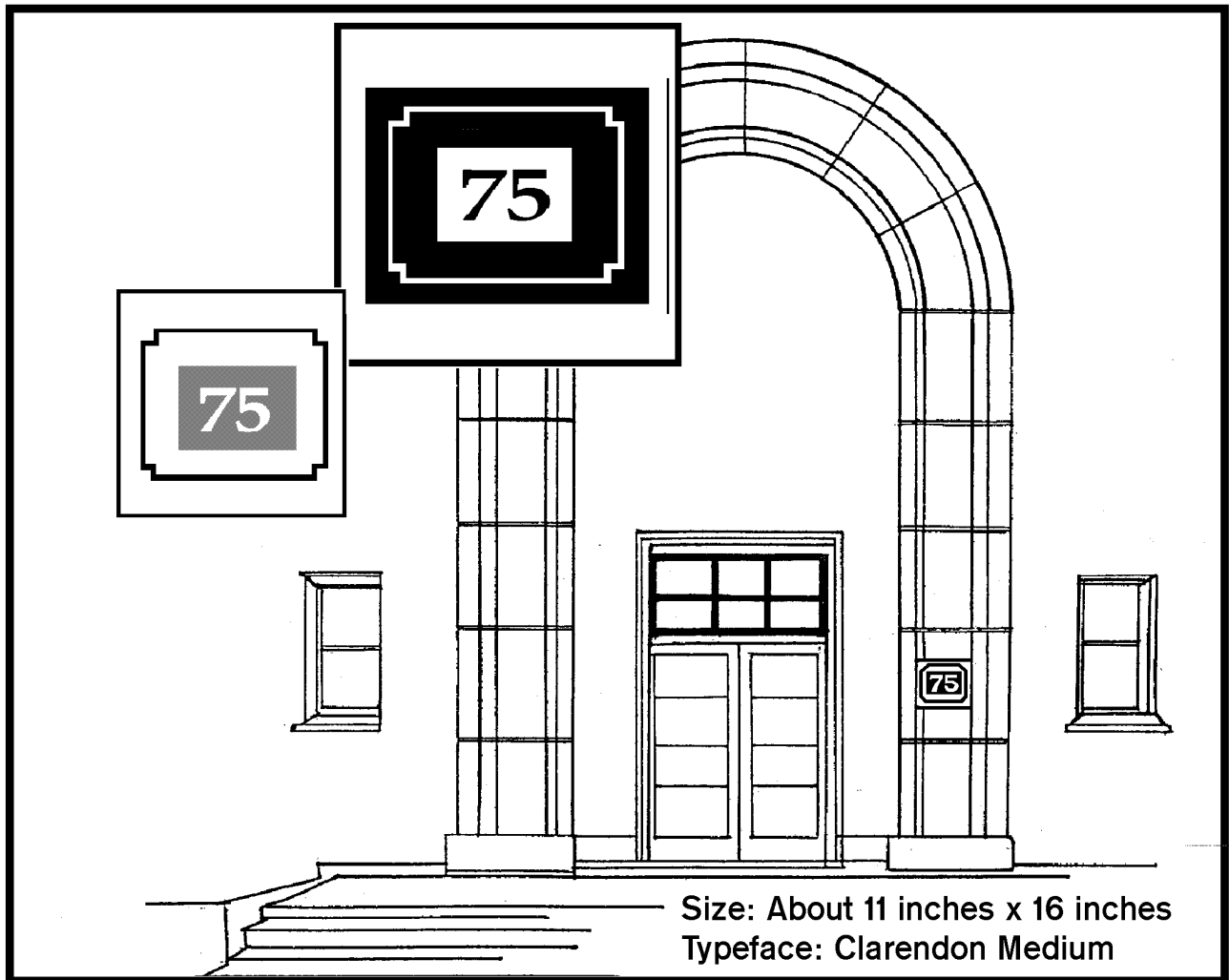


Figure A1.2. Historic Building Address Sign (Concept 1, Randolph AFB).

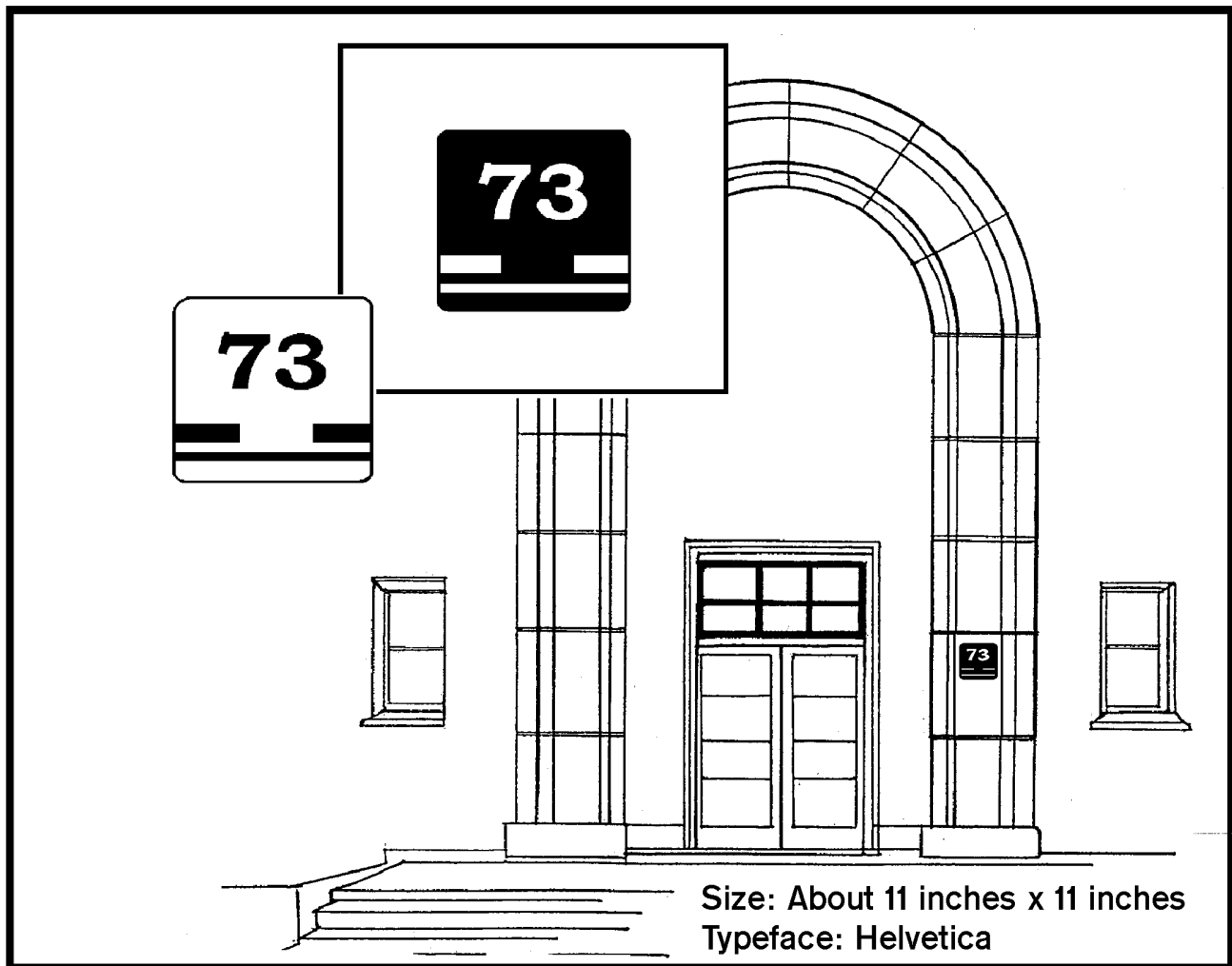


Figure A1.3. Non-historic Building Address Sign (Concept 2, AETC Bases Other Than Randolph AFB).





Figure A1.4. Signs Mounted on Buildings.

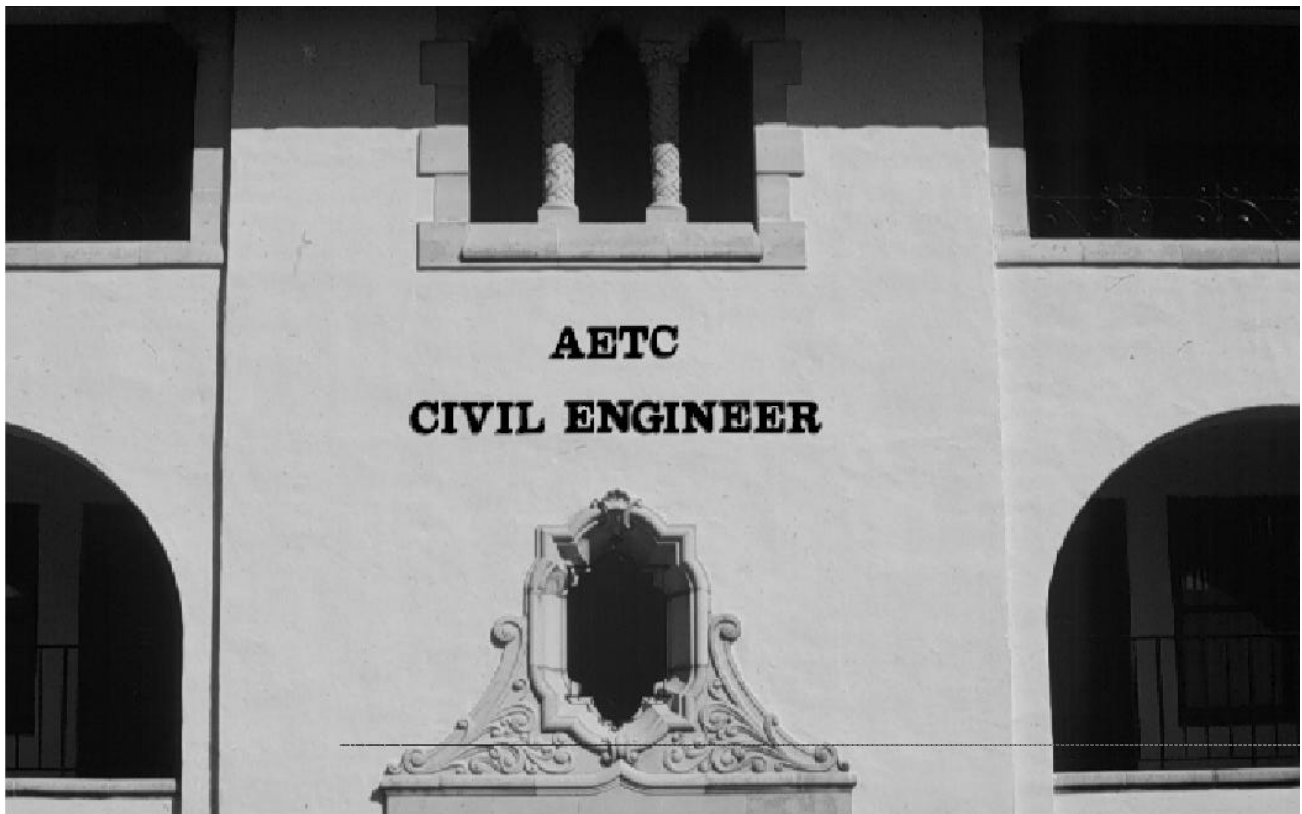


Figure A1.5. Signs Mounted on Buildings.

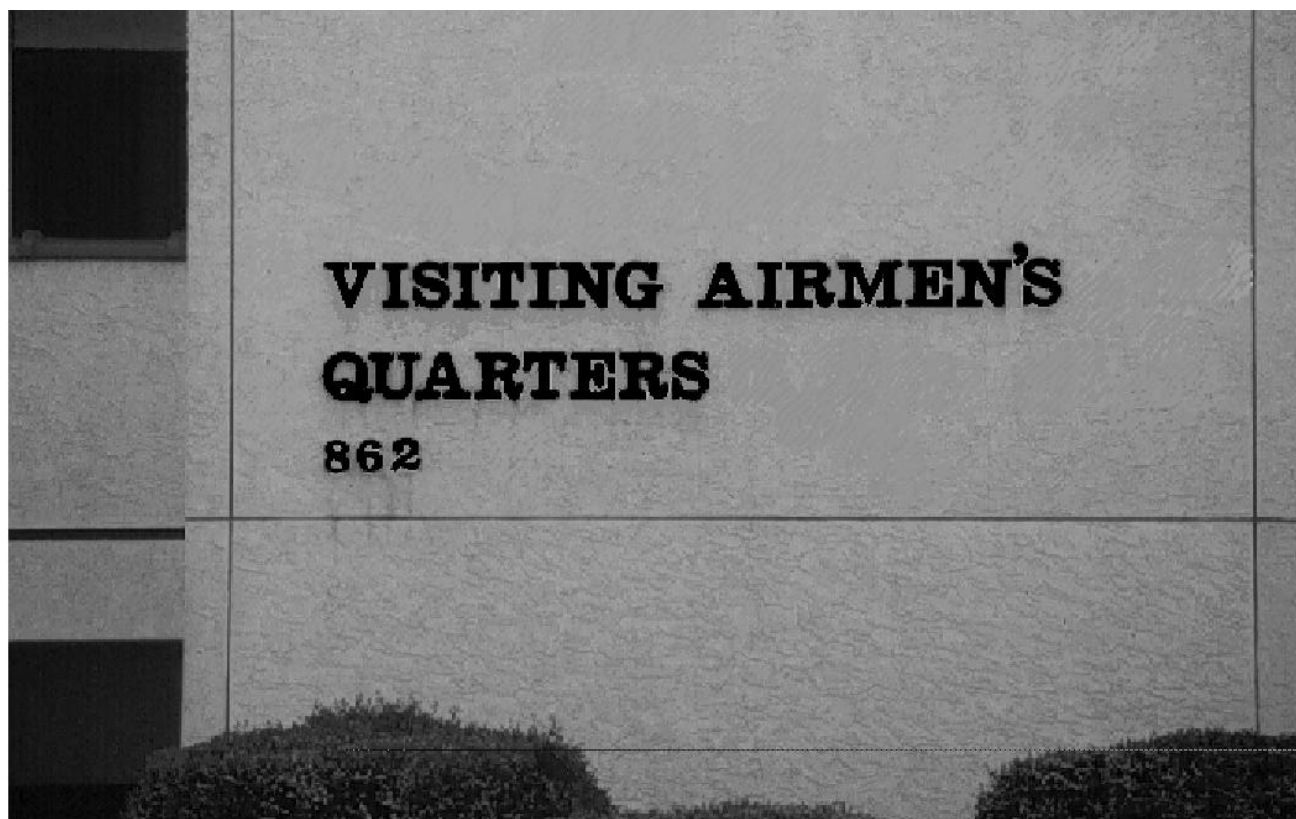


Figure A1.6. Signs Mounted on Buildings

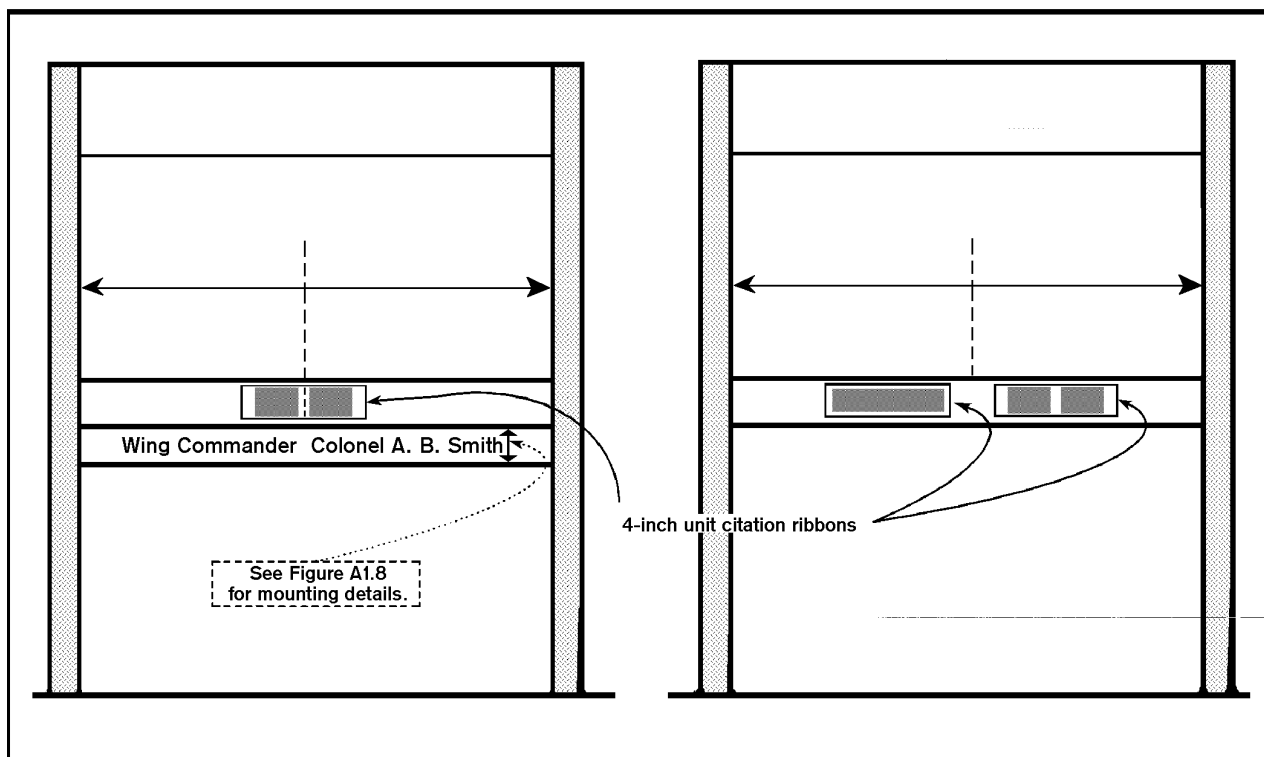


Figure A1.7. Display of Unit Award.

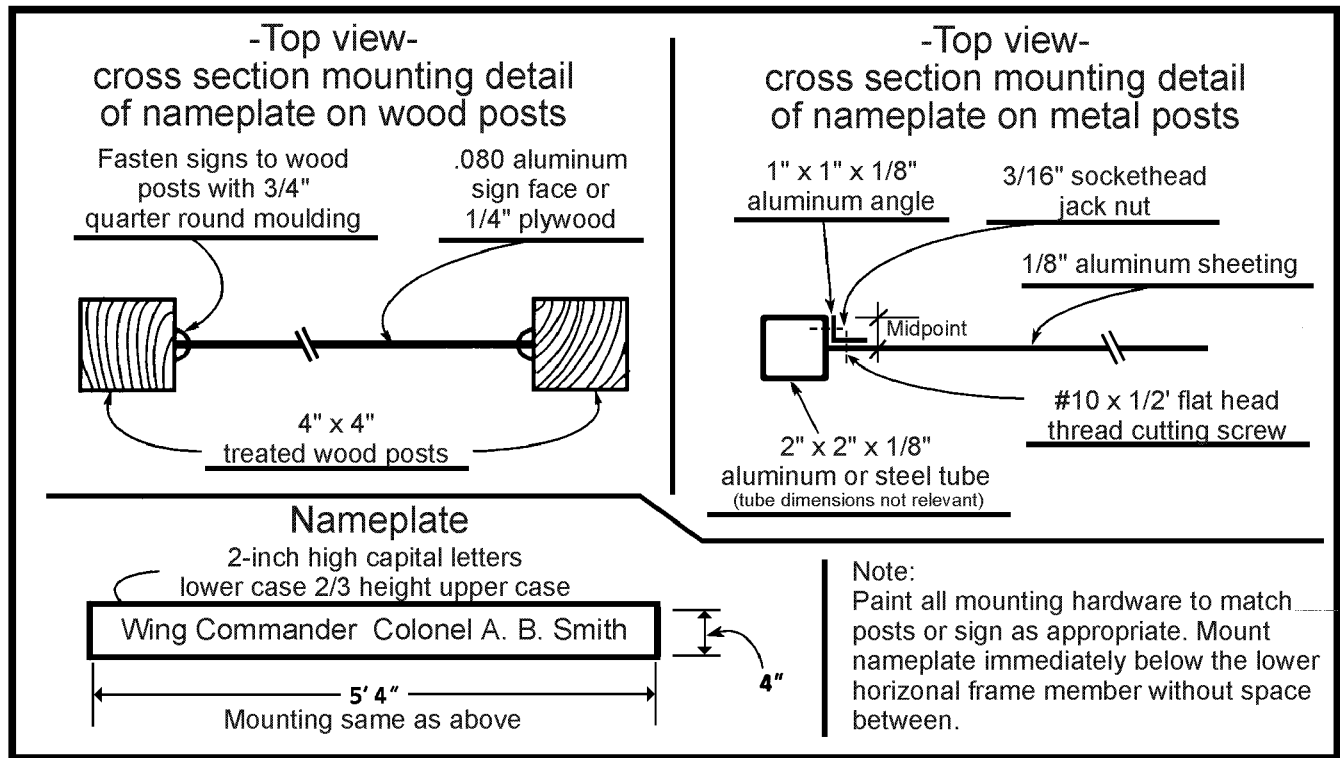


Figure A1.8. Nameplate Signage Mounting Details.

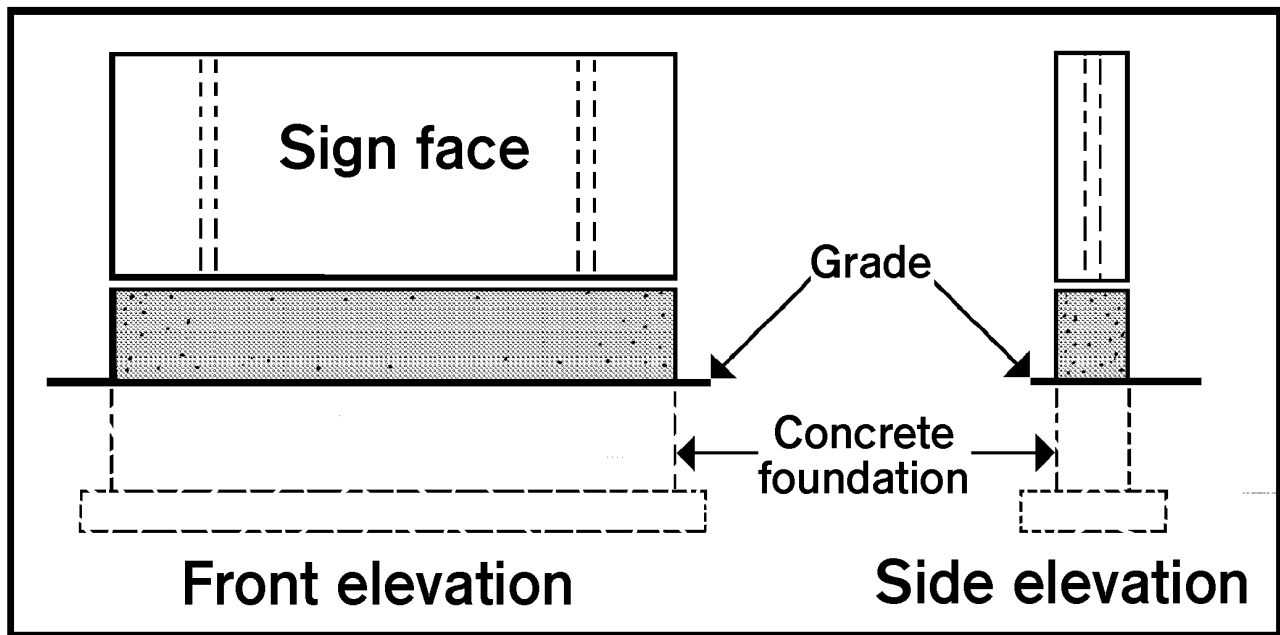


Figure A1.9. Monument Sign.

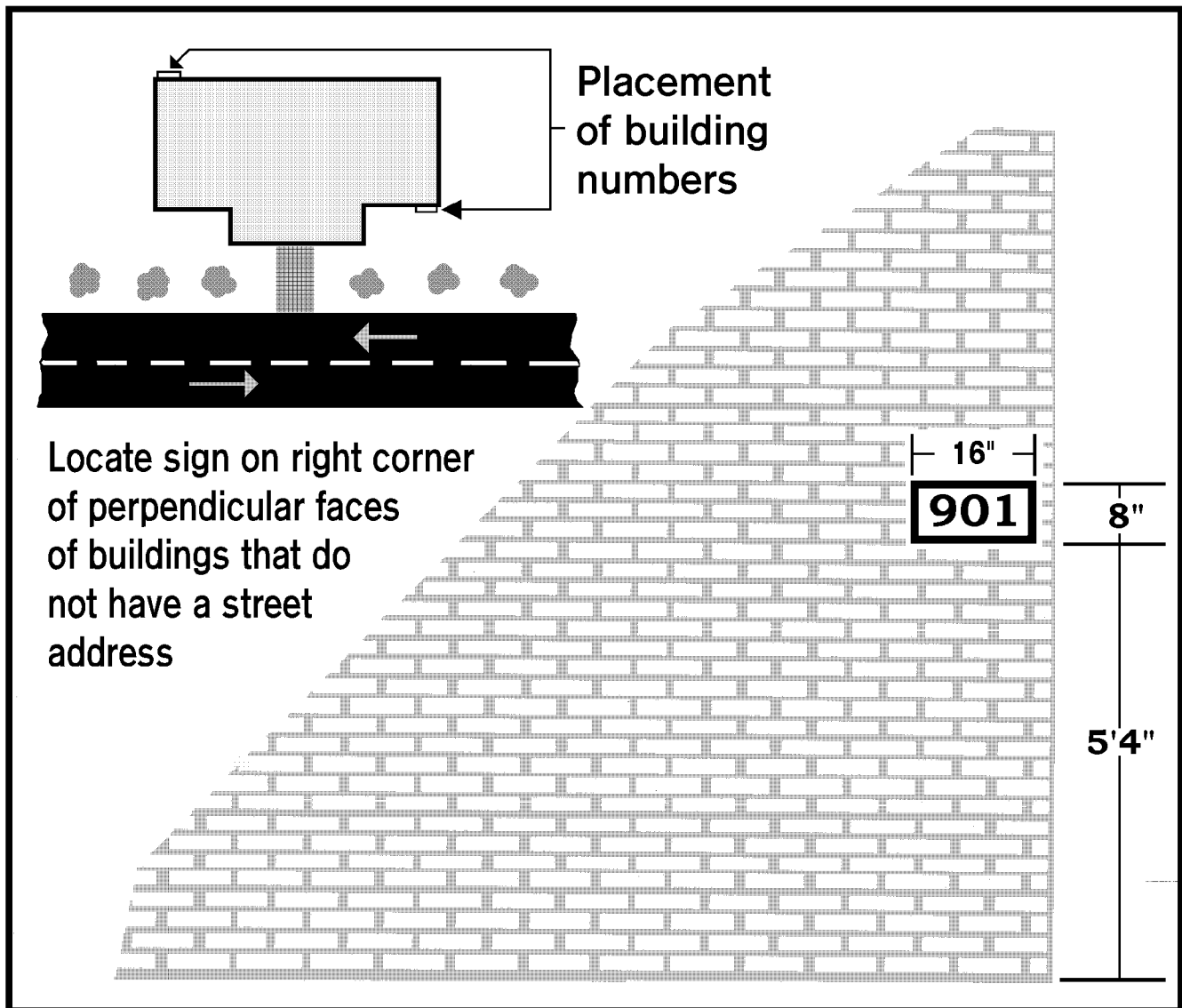


Figure A1.10. Building Number Sign.

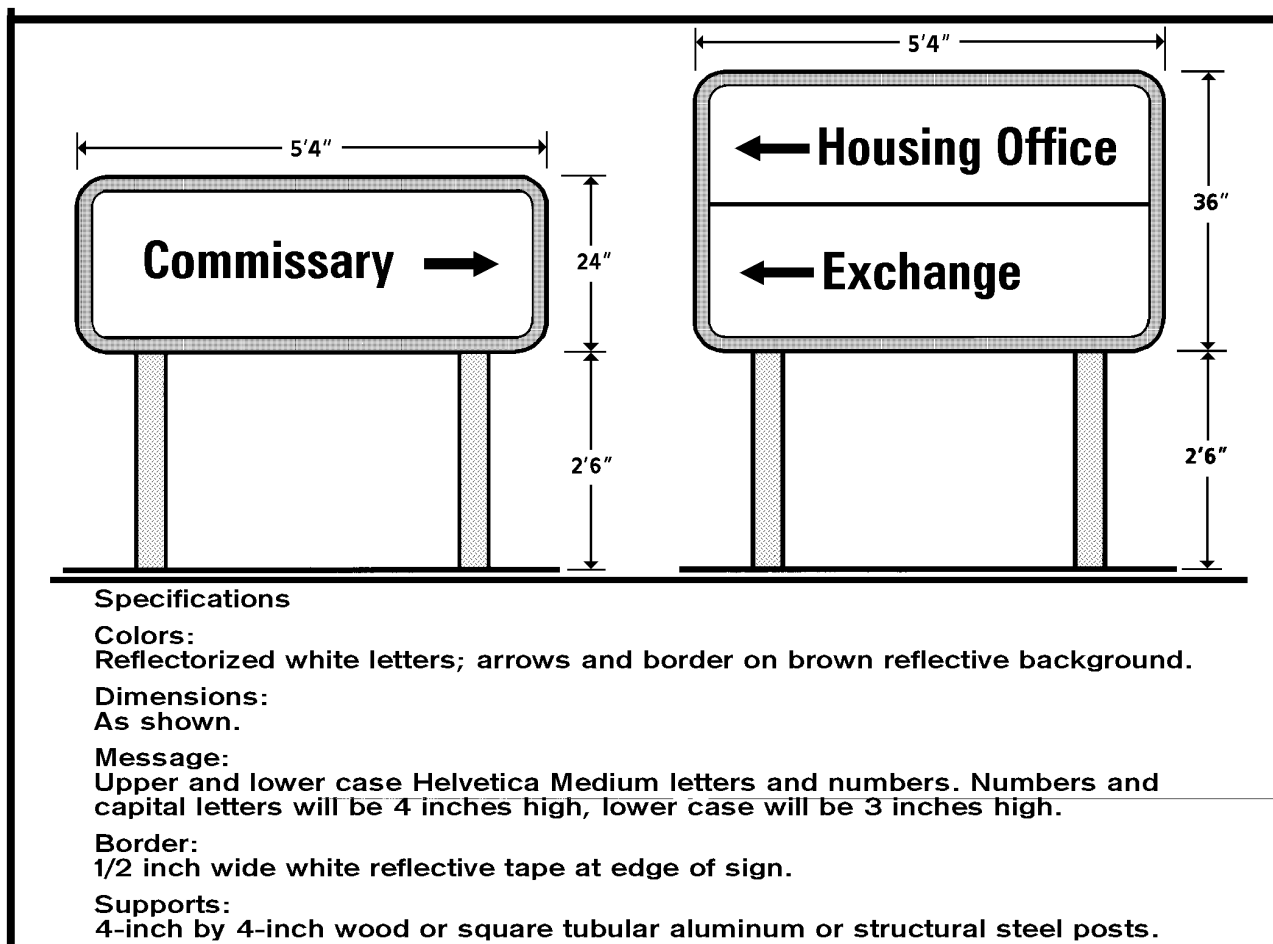


Figure A1.11. Directional Sign.

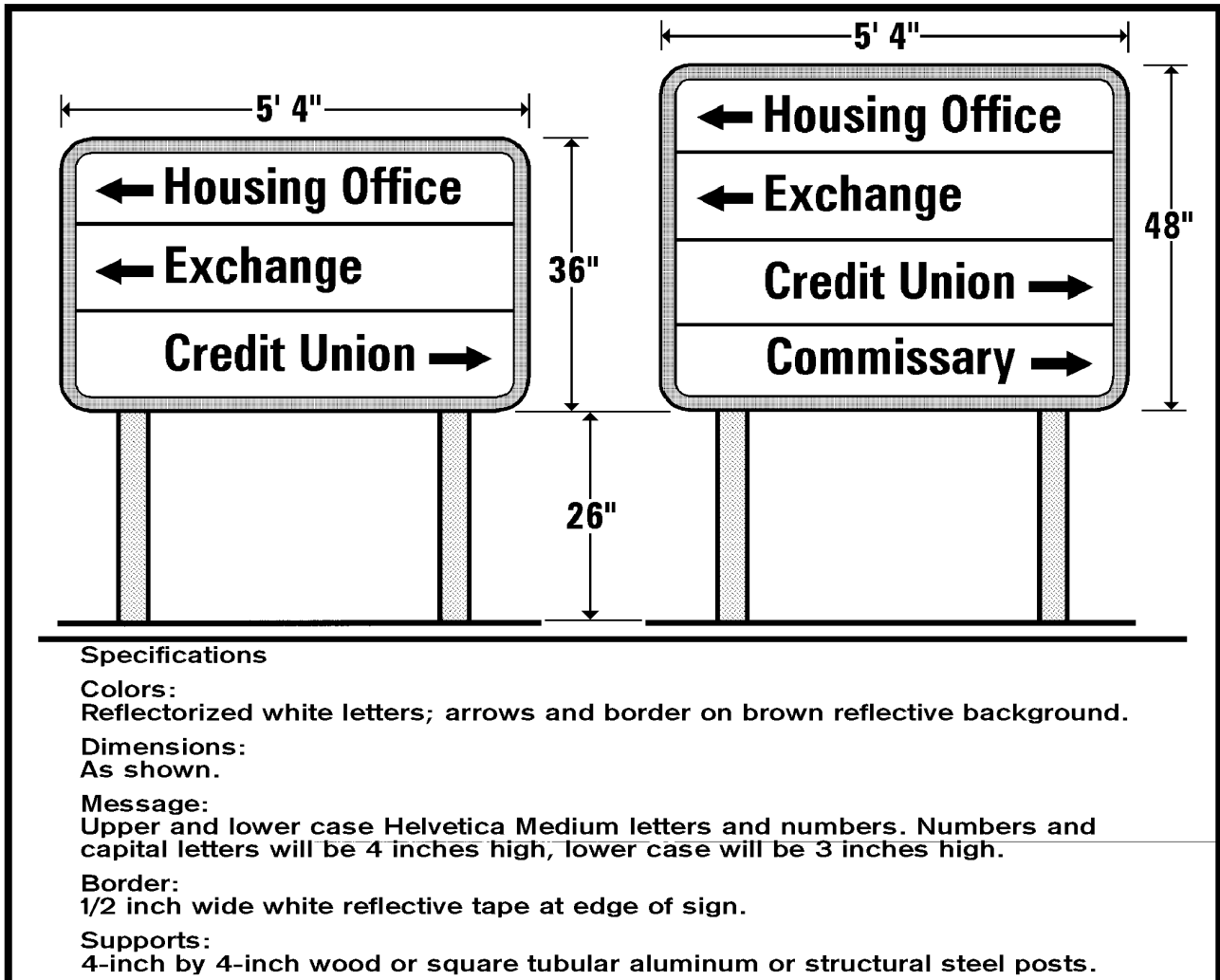


Figure A1.12. Direction Sign.

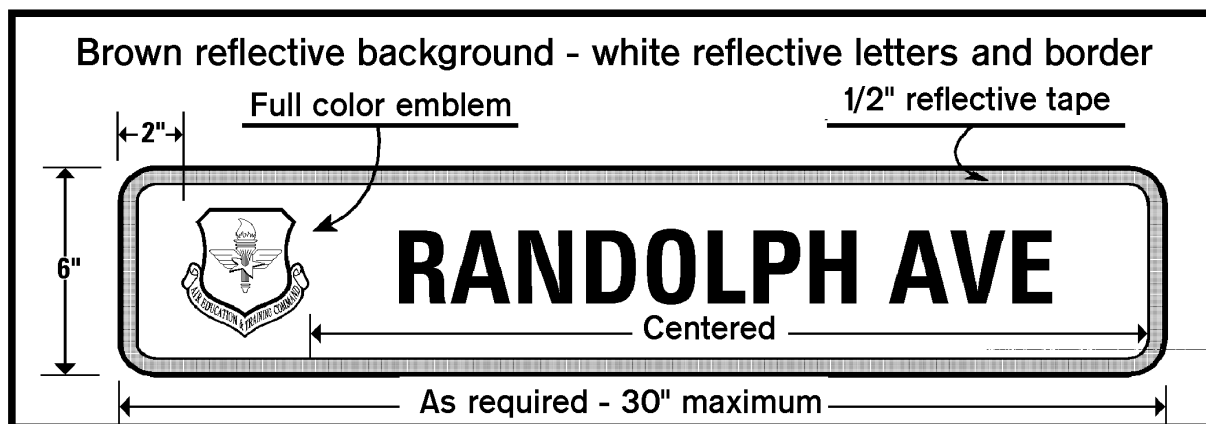


Figure A1.13. Street Name Sign.

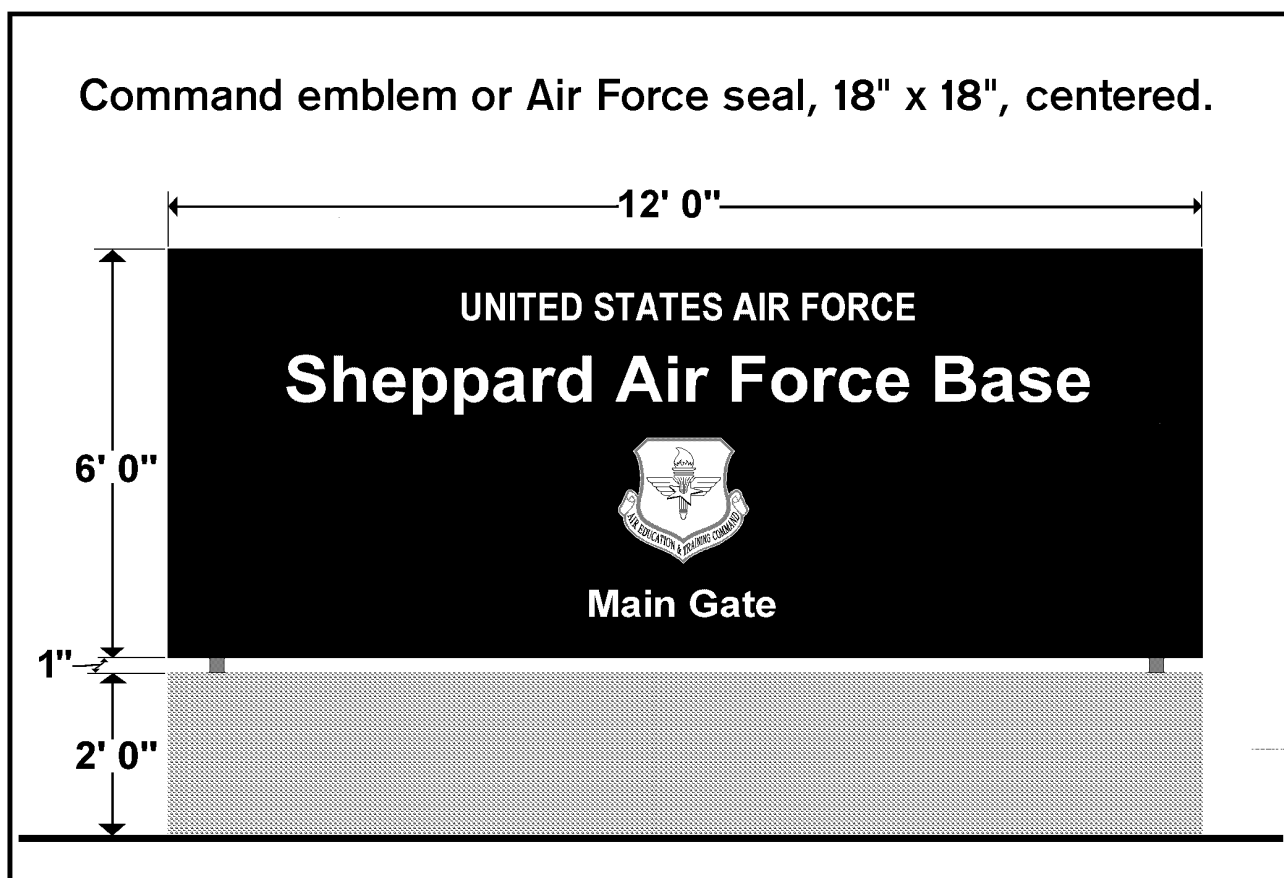
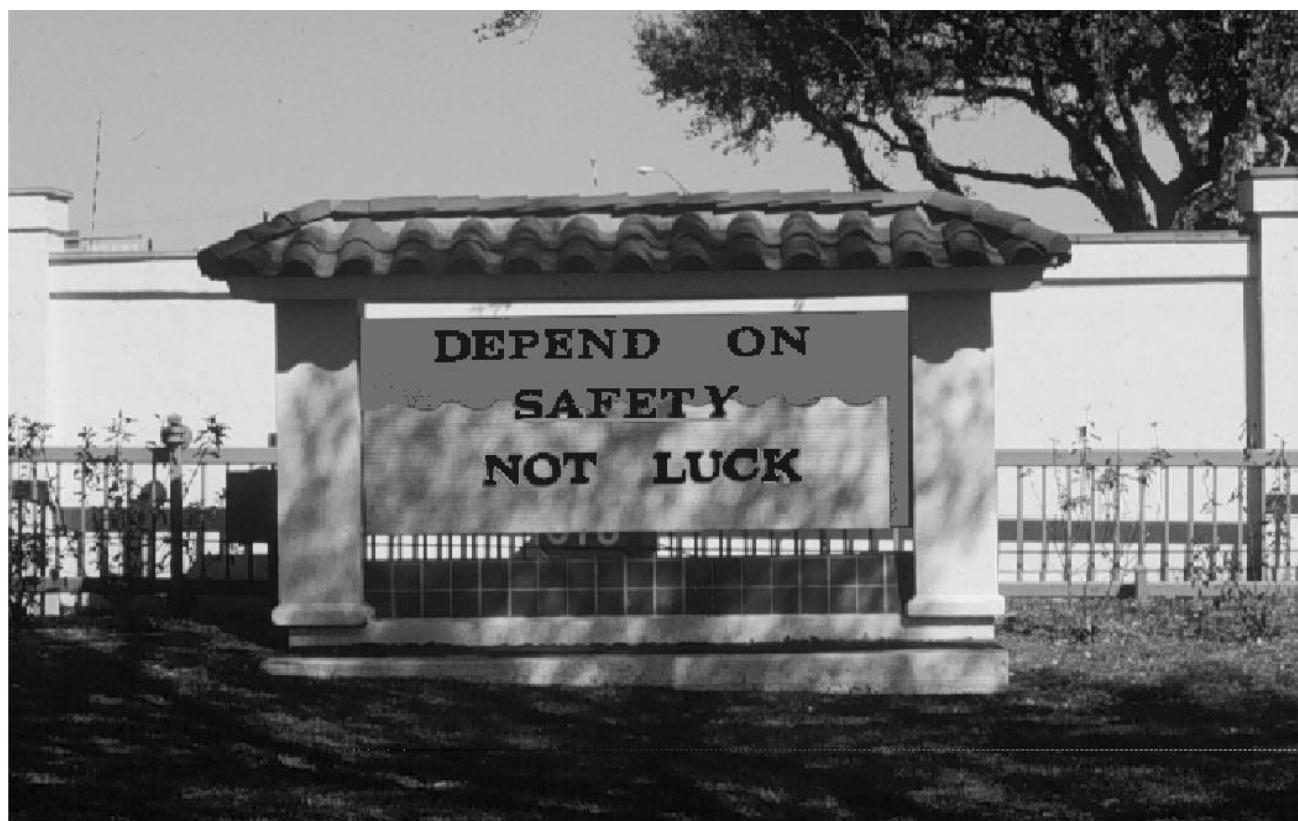


Figure A1.14. Main Gate Entrance Sign.



Figure A1.15. Main Gate Entry Screen Wall.



**Figure A1.16. Base Marquee Sign.**